FIG 1A

```
Rat     METFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSRLLVRGLGE
Human   MEPFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSRLLVRGLGE
        ** .********************************************************

Rat     HEMDEDEEDYESSAKLLGMSFMNRSSGLRNSATGYRQSPDGTCSVPSARTLVICVFVIVV
Human   HEMEEDEEDYESSAKLLGMSFMNRSSGLRNSATGYRQSPDGACSVPSARTMVVCAFVIVV
        ***:*********************************************:* .*.*****

Rat     AVSVIMVIYLLPRCTFTKEGCHKTNQSAELIQPIATNGKVFPWAQIRLPTAIIPQRYELS
Human   AVSVIMVIYLLPRCTFTKEGCHKKNQSIGLIQPFATNGKLFPWAQIRLPTAVVPLRYELS
        ***********************.***   ****:*****:**********::* *****

Rat     LHPNLTSMTFRGSVTISLQALQDTRDIILHSTGHNISSVTFMSAVSSQEKQVEILEYPYH
Human   LHPNLTSMTFRGSVTISVQALQVTWNIILHSTGHNISRVTFMSAVSSQEKQAEILEYAYH
        *****************:**** * :**********  *************.*****.**

Rat     EQIAVVAPESLLTGHNYTLKIEYSANISNSYYGFYGITYTDKSNEKKNFAATQFEPLAAR
Human   GQIAIVAPEALLAGHNYTLKIEYSANISSSYYGFYGFSYTDESNEKKYFAATQFEPLAAR
        ***:****:**:***************.*******::***:*****.************

Rat     SAFPCFDEPAFKATFIIKITRDEHHTALSNMPKKSSVPTEEGLIQDEFSESVKMSTYLVA
Human   SAFPCFDEPAFKATFIIKIIRDEQYTALSNMPKKSSVVLDDGLVQDEFSESVKMSTYLVA
        ****************** ***::************   :**:**:***************

Rat     FIVGEMRNLSQDVNGTLVSVYAVPEKIDQVYHALDTTVKLLEFYQNYFEIQYPLKKLDLV
Human   FIVGEMKNLSQDVNGTLVSIYAVPEKIGQVHYALETTVKLLEFFQNYFEIQYPLKKLDLV
        ******:************:******* .**: **:********:***************

Rat     AIPDFEAGAMENWGLLTFREETLLYDNATSSVADRKLVTKIIAHELAHQWFGNLVTMQWW
Human   AIPDFEAGAMENWGLLTFREETLLYDSNTSSMADRKLVTKIIAHELAHQWFGNLVTMKWW
        **************************. ***:************************:.**

Rat     NDLWLNEGFATFMEYFSVEKIFKELNSYEDFLDARFKTMRKDSLNSSHPISSSVQSSEQI
Human   NDLWLNEGFATFMEYFSLEKIFKELSSYEDFLDARFKTMKKDSLNSSHPISSSVQSSEQI
        ****************:******* .*************:********************

Rat     EEMFDSLSYFKGASLLLMLKSYLSEDVFQHAIILYLHNHSYAAIQSDDLWDSFNEVTGKT
Human   EEMFDSLSYFKGSSLLLMLKTYLSEDVFQHAVVLYLHNHSYASIQSDDLWDSFNEVTNQT
        ************:*******:**********::*********:*************.:*

Rat     LDVKKMMKTWTLQKGFPLVTVQRKGTELLLQQERFFPSMQPEIQDSDTSHLWHIPISYVT
Human   LDVKRMMKTWTLQKGFPLVTVQKKGKELFIQQERFFLNMKPEIQPSDTSYLWHIPLSYVT
        ****:*****************:**:**::****** .*:****.****:*****.****

Rat     DGRNYSEYRSVSLLDKKSDVINLTEQVQWVKVNTNMTGYYIVHYAHDGWAALINQLKRNP
Human   EGRNYSKYQSVSLLDKKSGVINLTEEVLWVKVNINMNGYYIVHYADDDWEALIHQLKINP
        :*****:*:*********.******:* ***** **.********.*.* ***:*** **

Rat     YVLSDKDRANLINNIFELAGLGKVPLQMAFDLIDYLRNETHTAPITEALFQTDLIYNLLE
Human   YVLSDKDRANLINNIFELAGLGKVPLKRAFDLINYLGNENHTAPITEALFQTDLIYNLLE
        **************************: *****:** **.*******************

Rat     KLGHMDLSSRLVTRVHKLLQNQIQQQTWTDEGTPSMRELRSALLEFACAHSLENCTTMAT
Human   KLGYMDLASRLVTRVFKLLQNQIQQQTWTDEGTPSMRELRSALLEFACTHNLGNCSTTAM
        ***:***.*******.****************************************:.* ** * *
```

FIG 1B

```
Rat     KLFDGWMASNGTQSLPTDVMTTVFKVGARTEKGWLFLFSMYSSMGSEAEKDKILEALASS
Human   KLFDDWMASNGTQSLPTDVMTTVFKVGAKTDKGWSFLLGKYISIGSEAEKNKILEALASS
        **** .*********************:*:*** **:. * *:******:*********

Rat     ADAHKLYWLMKSSLDGDIIRTQKLSLIIRTVGRQFPGHLLAWDFVKENWNKLVHKFHLGS
Human   EDVRKLYWLMKSSLNGDNFRTQKLSFIIRTVGRHFPGHLLAWDFVKENWNKLVQKFPLGS
        *.:**********:** :******:*******:*****************:** ***

Rat     YTIQSIVAGSTHLFSTKTHLSEVQEFFENQSEATLQLRCVQEAFEVIELNIQWMARNLKT
Human   YTIQNIVAGSTYLFSTKTHLSEVQAFFENQSEATFRLRCVQEALEVIQLNIQWMEKNLKS
        ****.******:*********** ********:.:*******:***.****** :***:

Rat     LTLWL
Human   LTWWL
        ** **
```
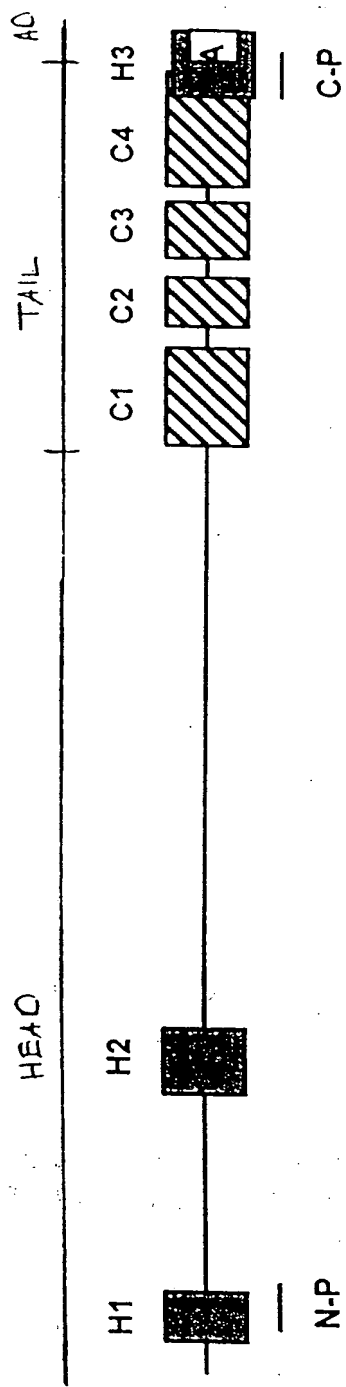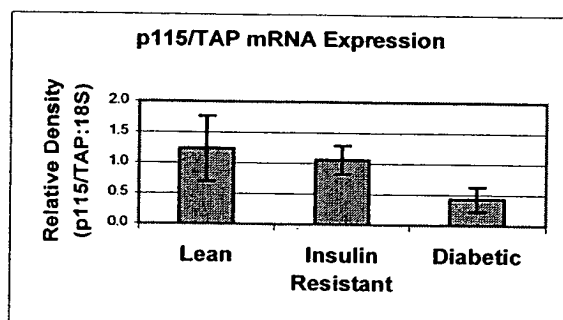
FIG 2

FIG 3A

p115/TAP mRNA Expression

Relative Density (p115/TAP:18S) — Lean, Insulin Resistant, Diabetic

FIG 3B

p115/TAP Protein Expression

Arbitrary Units — Lean, Insulin Resistant, Diabetic